### **Purchasing Receipts**

PO No	Supplier	Line Item No	Rei No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Serial No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total
PO038795	MEC002- VU	6	1	Net 30		Round Alum Billet AS PER DWG D6103 REV. B MATERIAL: 7075-T7351 AS PER QQ-A- 225/9 SIZE: 3.500"" X 12.500"" LONG				20	2/6/2018	20		\$097823	Stock	2/1/2018	\$ 60.40 / pcs	0		\$1,208
		7		6		77-4 SS Roundbar 4.00""Od AS PER DWG D6104 REV. B MATERIAL: 17- 4 PH AS PER AMS 4643 OR AISI 630 SIZE: 4.00"" X 5.10"" LONG				10		10		\$037824	Stock	2/1/2018	\$ 54.20 / pcs	0		\$542

Plex 2/1/2018 10:06 AM Dart Dubois Pascal



## A. M. Castle & Co.

### PACKING SLIP/ CERTIFICATE OF CONFORMANCE

Pack Slip No:2817870

Page 1 of 1

07407-47
STO AREDDEEN HAWKERDLIDY ON KE
K7 CA
Politoni
DELIVERY NO
121553955
4.0000.RD.17CR-4NI, STAINLESS.RT.SOL TR.COND A.132.0000-156.0000  CUICLE 4-IN (*1250/0000 IN) - BAND SAW CUTTING SPECIFICATIONS
Ce CIV
10.00 PCS
OF DELIVERY
Shinned Oty (I BS)
טוווייים אנץ (בסט)
R.COND A. SAW CUTT  Invoice Oty  10.00 PCS  LIVERY

any other country or to any person other than the authorized ultimate consignee or end-user(e), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

We hereby certify the material covared by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.E. Maste & Co. within 60 days of the shipment. Material to the correct sub, or material cut by the customer cannot be returned Reviewed by Authorized Castle Metals Reprosontative:

C.002 10



## A. M. Castle & Co.

### PACKING SLIP/ CERTIFICATE OF CONFORMANCE

Ship From:	ada) Inc	Sold To:		Ship To:	Deliver To:	1 dev 2015 140.501701
Toronto	ada) Inc.	1270 ABI	1270 ABERDEEN HAWKESBURY,	DART AEROSPACE LTD 1270 ABERDEEN	DART AER	DART AEROSPACE LTD
2150 Argentia Road MISSISSAUGA, ON L5N 2K7	V 2K7	ON K6A 1K7 CA	1K7 CA			IK7 CA
Date Shipped	F.O.B.		Freight Terms	Carrier	BOI NO	
23-JAN-2018	ORIGIN		Prepaid	LOCAL_FLEET		121555610
Shipment Details				Final Destination Branch		
Order No	Line No	110	Item No	Description		
5014847		88	8808.MO	3.5000RD.7075.T7351.ALUMINUM.CF.144.0000 CUT TO 12.5 M (₹,1250/0000 IN) - BAND SAY	NUM.CF.144.000 00 IN) - BAND S	F.144.0000 - BAND SAW CUTTING SPECIFICATIONS:
Purchase Order No		Part Number	)er	CICZZ-W-DIA		
38795		YOUR ITE	YOUR ITEM NUMBER: D6103-003	22.00 PCS	22.0	22.00 PCS
Details	ALL ALL	PAPERWO	ALL PAPERWORK MUST FOLLOW ORDER / ALL MATERIAL MUST HAVE IDENTIFYING N Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS	ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS	TIME OF DELIVERY	RY
Mill/Source	Heat	Heat Number	Mech ID	PCS Width (IN)	Length (IN)	Shipped Qty (LBS)
ARCONIC INC	MA2	MA20171470	1	22		266.7582
			-			
We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on the subject to examination. All claims for detective material are waived unless made in writing to A.M. Castle & Co. within 80 days of the shipment. Material cut to the correct significant or material cut by the customer cannot be return.	od by this certificat	ion conforms in a		and has been found to med the applicable requirements	for the material, including	any specifications forming a part of the
Reviewed by Authorized Castle Matals Representative	areas authors, the capit	ns for defective m	scordance with the above specifications atorial are waived unloss made in writing	A LE A	lerial cut to the correct si	be or marching but by min characters country he refutited



Dart Aerospace Ltd. 1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada

### **PURCHASE ORDER** PO038795

Tel (613) 632-5200

Supplier: MEC002-VU

Ship To:

Metaux Castle P.O. Box 4090 Stn A

Toronto ON

M5W OE9 Canada

1270 Aberdeen Street

Hawkesbury

K6A 1K7 Canada

Phone: 613-632-5200

ON

PO No:

PO038795

PO Date:

1/16/18

Due Date:

2/6/18

Purchase Order

Revision:

**Revision Date:** 

Ship-To Contact:

Via:

Ground

Pymt Terms:

Net 30

Freight Terms:

				Items	Ciai Coi	nments:				No extend to the
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extende Price
1	D6101- 001P		7075-T7351 2X6X6.25 AS PER DWG D6101 REV. B SIZE: 6.00" X 6.250" X 2.00' THICK GRAIN DIRECTION ALONG 6.00" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/000"		2/6/18	40 pcs	0 pcs	40 pcs		\$1,075.2
Line Item Note	job# 17039	92								
2	D6101- 003P		7075-T7351 2X6.25X7.875 AS PER DWG D6101 REV. B SIZE: 7.875" X 6.250" X 2.00" THICK GRAIN DIRECTION ALONG 7.875" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/000"		2/6/18	40 pcs	0 pcs	40 pcs	\$35.29/pcs	\$1,411.6
ine Item Note	job# 17039	3								
3	D6101- 005P	5 5 6 6	7075-T7351 8.25X5.0X2.5 AS PER DWG.D6101 REV.B SIZE: 5.00" X 8.250" X 2.50" FHICK GRAIN DIRECTION ALONG 5.00"" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 FOLERANCE AS PER QUOTE +.030"/-,000"	Firmed	2/6/18	60 pcs	0 pcs	60 pcs	\$36.20/pcs	\$2,172.00
ine Item Note	job# 17039	5								
1	D6101- 007P		075-T7351 8.25X7.75X2.5 S PER DWG D6101 REV.	Firmed	2/6/18	60 pcs	0 pcs	60 pcs	\$56.11/pcs	\$3,366.60



Dart Aerospace Ltd. 1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada

### PURCHASE ORDER PO038795

Tel (613) 632-5200

7 ( )	Live T			Items	E L					
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extende Price
			MATERIAL: 7075-T7351 (QQ-A-250/12) SIZE: 7.750" X 8.250" X 2.50" THICK GRAIN DIRECTION ALONG: 7.750" LENGTH TOLERANCE AS PER QUOTE +.030"/000"							
ine Item Note	job#17040	4				CLE STREET SHARESTONE (				
5	D6101- 013P		Saddle Billet AS PER DWG D6101 REV. B MATERIAL: 7075-T7351 (QQ-A-250/12) SIZE:10.100" X 8.250" X 2.50" THICK GRAIN DIRECTION ALONG: 10.100" LENGTH TOLERANCE AS PER QUOTE +.030"/000"	Firmed	2/6/18	16 pcs	0 pcs	16 pcs	\$73.15/pcs	\$1,170.40
ine Item Note	job# 17039	16		,						
6	D6103- 003P 5037813		Round Alum Billet AS PER DWG D6103 REV. B MATERIAL: 7075-T7351 AS PER QQ-A-225/9 SIZE: 3.500" X 12.500" LONG	Firmed	2/6/18	20 pcs	0 pcs	20 pcs DAS 11 9-89	\$60.40/pcs	
ine Item Note	job# 17039	7		have and						
7	D6104- 005P 5037824		17-4 SS Roundbar 4.00"Od AS PER DWG D6104 REV. B MATERIAL: 17-4 PH AS PER AMS 4643 OR AISI 630 SIZE: 4.00" X 5.10" LONG	Firmed	2/6/18	10 pcs	10	10 pcs AS 1 1 1 89	\$54.20/pcs	\$542.00

### **Order Notes**

**Procurement Quality Clauses** 

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness





Dart Aerospace Ltd. 1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada

### PURCHASE ORDER PO038795

Tel (613) 632-5200

### **Order Notes**

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit <a href="https://www.dartaerospace.com">www.dartaerospace.com</a> for further explanation.

Plex 1/16/18 10:49 AM dart.baker.diane



# METALLURGICAL TEST REPORT

(502) 347-6000 Ghent, KY 41045-9615 6870 Highway 42 East

Certificate: 351078 01 0032 006 1420 KENSINGTON ROAD-SUITE 220 OAK BROOK IL 60523 A.M. CASTLE AND Mail To: COMPANY PARAMOUNT Ship To:

A.M. CASTLE AND COMPANY 14001 ORANGE AVENUE Ç 90723

Heat Treat Code: 43,910

Dia/Thk: Finish: Hot Finish 144.00 in 4.0000 27

Steel:

630 (17-4)

Date: 11/06/2017

Page:

H O H

Leg Length: Length:

Corrosion:

PRODUCT DESCRIPTION: Your Order: NAS Order: Customer:

LP 70989

Red Ratio: 4.7:1

Item Code:

42464

437569-1

UT per API6A PSL3, ASTM A388-S1 criteria, UT passed SOL. ANNEALED @ 1900F MIN FOR 1 HR MIN. and air cooled to RI ASTM A564/13, AMS 2303F, ASME SA564-07, ASTM F899/12b UNS S17400; EN 10204 3.1, ASTM A484/16, MACRO OK, Round Bar, Hot Rolled, Annealed, Rough Turned AMS 5643U

H900 MECH. PROPERTIES ARE CAPABILITY ONLY\*

### REMARKS:

2011/65/EU.ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG COMPLIES W/REQUIREMENTS OF DFAR 252,225-7009 EU DIRECTIVE IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

BJ10266	Bundle
1022	Weight
	Bundle
	Weight

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323 Chemical Analysis per ASTM A751/14a

		556V	NAS Heat
			Supplier Heat CM
		Sn	CM
.0146	% S3	.033	n %
.54	SI %	.274	CB %
.0130	TA %	.05	% OO
.0025	TI %	15.31	CR %
		3.16	CU %
		.76	% NW
		.028	% OM
		.021	N %
		4.26	% IN
		.020	P %

### MECHANICAL P ROPERTIES

let.	
BJ10266	
Ħ L	н н-р
341.0	HB No.
8.0	Grain No.
.07	Ferrite
192.30	TS-900CAP
174.47	TS-900CAP YS-900CAP EL-900CAP KSI KSI % 4D
12.40	E1-900CAP
49.82	RA-900CAP %
41.0	RA-900CAP RC-900CAP
. 3 1	FREQ.
.16	SEV.
PO S PA	

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS

Technical Dept.Mgr.



### MATERIAL RECEIPT INSPECTION FORM

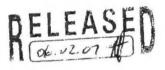
MATERIAL: 0610		_	PO BATCH	No.: <u>0587</u>	95/503782
MATERIAL CERT REC'D:	1.65		CKNESS ORDE		
QUANTITY RECEIVED: 22	70/65	_ THIC	KNESS RECE	VED: 3.50	00
QUANTITY INSPECTED: 22-	20PCS	SHE	ET SIZE ORDE	RED: 1	1/4
QUANTITY REJECTED:	Ø	SHE	ET SIZE RECE	VED: N	14
DESCRIPTION	NCR (Check		COMMEN	TS	
1	Y/N)				
SURFACE DAMAGE	Y(N)				
CORRECT FINISH	ON		2.00.00		
CORROSION	YO				
CORRECT GRAIN DIRECTION	(Y) N				
CORRECT MATERIAL PER M-DRAWING	Q N ASW	-052-A	- 225		
CORRECT THICKNESS	(A) N				
PHOTO REQUIRED  CORRECT REF # TO LINK CERT	( N Heat	11 1/11	Amillan		
CORRECT MATERIAL IDENTFICATION		#MA20	0111970		
CORRECT M# ON THE MATERIAL	A N				
DOES THIS MATERIAL REQUIRE	<del>\</del> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
ENGINEERING SIGN OFF	YN				
DOES THIS REQUIRE AN	1 (9)				
EXTRUSION REPORT	YN				
CUT SAMPLE PIEC	E OF MATERIAL /	AND PREFOR	M A HARDNE	SS CHECK.	
	RECORD RE	SULTS BELOV	V		
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READI					1
QC 18 INSPECTION	testers located in		ENGINEER		FF (if required
NSPECTED BY:		SIG	NED OFF BY:		
DATE: 9-FEB 0	1 2018		DATE:		

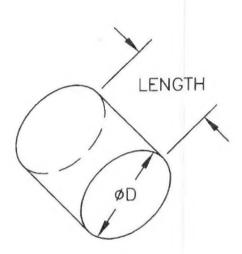
Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



DESIGN	DRAWN BY	DART AEROSPACE LTI	)
CHECKED		DRAWING NO. D6103 SHE	Rev. B ET 1 OF 1
DATE 06.01.	.31	ROUND BILLET, ALUMINUM	SCALE NTS
Α	01.04.10	NEW ISSUE	
В	06.01.31	ADD D6103-003	

### SPECIFICATION CONTROL DRAWING





PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, DIAMETER x LENGTH (+0.030/-0.000) AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	D (Diameter)	Length
D6103-001	7075-T6/T651 (QQ-A-200/11 OR,QQ-A-225/9)	Ø3.250	12.50
D6103-003	7075-T6/T651 (QQ-A-200/11 OR,QQ-A-225/9) 7075-T7351 (QQ-A-225/9)	Ø3.500	12.50
	X		
	Pr.		

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## Certified Inspection Report

07/14/17

### ARCONIC FORGINGS AND EXTRUSIONS 45 County Route 42, Massena, NY 13662 Arconic Inc.



Ship To Castle A M & Co Customer Castle A M & Co 3800 Enterprise Drive Janesville, WI 53546 Customer P.O. No. Customer Part No. (808B) We hereby certily that the material covered in this report has been inspected in accordance with, and has Arconic Order No. MMC-C3746- -001

Govt. Contract No.

been found to meet the applicable requirements described herein, including any specifications forming a part of the description, or as previously agreed to with customer and that samples representative of the material met the composition limits and have the mechanical properties shown on the face of this sheet. Menufactured under a quality management system registered to ISO/TS 16949 and AS9100.

Melted and manufactured in the USA.

osedh M. Vierno, Quality Manager

AMS4124E
ASTMB211-12E1
ASTMB211-12E1
Material conforms to T73 remts
Minumum mechanical properties to apply:
68 KSI Tensile Strength
56 KSI Teld Strength
10% Elongation
00-A-225/9E (Except Size)
AMS-00-A-225/9E (Except Size)
A97075-11 Rev 15 Specifications: Allay - Temper Date Shipped 07/14/17 7075-77351 Weight Shipped Size 3.50000 IN 7,970 lbs Product CFRB-CF ROD Shape DIA Config Specific Length 12 FT BOL 000165011

MA20171470 Lot / Work Suger Test Results U.T.S. Ultimate TEST REQUIREMENTS Ultimase Tensile Strength KSI No. of Max Max Min: U.T.S. U.T.S. Test 1031 68.0 75.2 T.Y.S. T.Y.S. Test 1651 67.9 64.6 56.0 %Elong %Elang 1881 Test Tensile Yield Strength KSI ,2% olfset 15.0 10.0 15.0 Die Cond Tost Cand Test 38.0 40.5 40.5 Test Test Test Test Test Test Test Test Tesi Test Test Test

Alumnum Association Chemical Composition Limits (in Weight %) Conductivity % IACS

Cond

5.20	0.78	2.7	-	11.2	
The same of the sa	0.28 6.1 0.20 0.05 0.15 Rem	2.5	0.30	4.0	ME

%Elong

Elongation % in

LOT/WORK ORDER

41

NOTES:

MA20171470

MAX

0.05 0.05 888

7.6 7.6

2.5

%CR

0.79 0.79

01 00

0.02 \*11

> T 30%

0.05

LT 0.15 10%

Rem XAL

0.02

WWW. 0.00 0.00

%FE 0.11

ingot Spurce: Lafayette Material compliant with DFARS 252.225.7001 (Buy American Act) Mercury is not a normal conteminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product.

# Certified Inspection Report

07/14/17

Arconic Inc.

ARCONIC FORGINGS AND EXTRUSIONS

45 County Route 42, Massena, NY 13662

Arconic Order No.

AMMC-C3746- -001

ARCONIC SO

Govt. Contract No.

Customer Castle A M & Co

Customer P.O. No. 431398

Customer Part No. (8808)

Notes (continued)
This alloy meets the requirements of EU 2011/65/EC (RoHS) and EU 2000/53/EC for lead, mercury, cadmium and hexavalent chromium.

p 10

### MATERIAL RECEIPT INSPECTION FORM

MATERIAL: OGIG	24/- EB	00	25 2018	_		PO BATCH	NO. <b>0387</b> 4	5/5037844
MATERIAL CERT REC'D:	100				TUIC	INIESS OBDE	DED: 4.1	
				_		KNESS ORDE	The second secon	THE PERSON OF THE PERSON OF
QUANTITY RECEIVED:	10	PC5	`	_	THIC	KNESS RECEI	VED: 4.00	2
QUANTITY INSPECTED:	01	55			SHEE	T SIZE ORDE	RED: NI	14
QUANTITY REJECTED:	20			<u> </u>		T SIZE RECE	/	4
DESCRIPTION	(Cr	CR				COMMEN	TS	
1		/N)						
SURFACE DAMAGE	Y	N	4					
CORRECT FINISH	(4)							
CORROSION	Y	N						
CORRECT GRAIN DIRECTION	()	N	1	-/-	10			
CORRECT MATERIAL PER M-DRAWING	Y	N	HMIS	564	5			
CORRECT THICKNESS	Q	N	-					
PHOTO REQUIRED	Y	(1)	11 - 2	121	7	,		
CORRECT REF # TO LINK CERT	00	N	Her	4)	56V			North-foresteen make of safety of management stay, yo
CORRECT MATERIAL IDENTFICATION	1	N						
CORRECT M# ON THE MATERIAL	0	N						
DOES THIS MATERIAL REQUIRE	V	8	·					
ENGINEERING SIGN OFF DOES THIS REQUIRE AN	1	(1)	-					A MANUAL STATE OF THE STATE OF
EXTRUSION REPORT	V	A						
EXTROSION REPORT	1 -		1					
CUT SAMPLE PIEC			ORD RE	SULTS	BELOW	i		
			HRC	H	RB	DURA	DUR D	WEBSTER
TYPE OF MATERIAL							9	
SIZE OF TEST SAMPLE				-				
HARDNESS / DUROMETER READI	NG							
QC 18 INSPECTION		esters	s located in	7 the Qu	ality Offic		RING SIGNO	FF (if required
INSPECTED BY: 11					SIGN	VED OFF BY:		
9-89 DATE: FEB 0 1	201	R				DATE:		
	401	v				had to a hour.		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

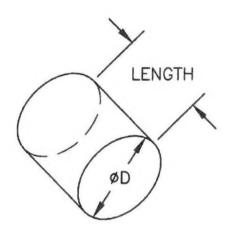




	DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
Ī	CHECKED	APPROVED	DRAWING NO.	Rev. B		
	-	911	D6104	SHEET 1 OF 1		
ı	DATE		TITLE	SCALE		
	02.11.25		ROUND BILLET, 17-4	NTS		
	Α	01.04.10	NEW ISSUE			
	В	02.11.25	CLARIFY ALLOY SPEC ADDED D6104-009/-011 REDUCE LENGTH OF BILLETS			

### RELEASED 02.11.29

### SPECIFICATION CONTROL DRAWING



MATERIAL: 17-4 PH SS (AMS 5643 OR AISI 630) MIN UTS = 170 KSI (38 HRc)

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, DIAMETER x LENGTH (+0.030/-0.000) AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES

Part No.	Alloy	D (Diameter)	Length	
D6104-001	17-4 PH STAINLESS STEEL	Ø3.00	3.80	
D6104-003	17-4 PH STAINLESS STEEL	Ø3.25	3.80	
D6104-005	17-4 PH STAINLESS STEEL	Ø4.00	5.10	
D6104-007	17-4 PH STAINLESS STEEL	Ø4.50	5.10	
D6104-009	17-4 PH STAINLESS STEEL	Ø5.25	4.10	
D6104-011	17-4 PH STAINLESS STEEL	Ø6.50	4.10	